Index of Claims

| Application/Control | No |  |
|---------------------|----|--|
|---------------------|----|--|

10/624,710 Examiner

Applicant(s)/Patent under Reexamination

MARANTO, JOSEPH
Art Unit

Kent L. Bell

1661

Rejected Allowed

(Through numeral)
Cancelled Restricted

Non-Elected Ν Interference

Appeal Α o Objected

| Cla      | aim      | Π.             |          |              | ī        | Date   | в        |  |          |  |   | Cla  | im        |                 |                 |          | Da      | te       |                           |                 |          |              | Cla      | im         |          |                 |          | C        | ate      | ;        |          | _        | $\Box$   |
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|          | <u></u>  | 5              | 1        |              |          |  |          |  |          |  |   |  | <u>-a</u> |                 | - [             |          |         |          |                           |                 | .        |              | _        | ᡖ          |          |                 |          | ł        |          | - 1      |          |          |          |
| Final    | Original | 6/4/8          | t        |              | ļ        |  |          |  |          |  |   | Final  | Original  |                 | - {             | 1        |         |          | Н                         |                 |          |              | Final    | Original   |          |                 |          |          |          | ı        |          |          |          |
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| <u> </u> | _        | 0              | <u> </u> | _            | <u> </u> |  |          |  | Ш        |  |   |  |           |                 | _               | 4        | 4       | ╀-       | 11                        | $\perp$         | 4        | L            |          |            |          |                 |          | _        | _        | $\dashv$ | 4        | $\dashv$ | ᅴ        |
|          | 1        | _              | 1_       | <u> </u>     | L        | _  | Ш        |  | Ш        |  |   |  | 51        | $\sqcup$        |                 | +        | +       | ╀-       | $\vdash$                  | -               | 4::      | -            |          | 101        | _        | -               |          | -        | 4        | $\dashv$ | $\dashv$ | $\dashv$ | ႕        |
| <u> </u> | 2        | <u> </u>       | ┡        | _            | ╙        | _  | Щ        | L.   | Ш        |  |   |  | 52        | $\vdash$        | $\dashv$        | +        | +       | ╀        | ₩                         | +               | -        | -            |          | 102        | $\dashv$ | -               |          | -        | -        | $\dashv$ | $\dashv$ | 4        | -1       |
|          | 3        | <u> </u>       | ┢        | <u> </u>     | ⊢        | ├—   | H        | -  | Н        |  |   |  | 53        | $\vdash$        | -               | +        | +       | +        | ╁                         |                 |          | ŀ            |          | 103        |          |                 |          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | ᅴ        |
| <u> </u> | 4        | <del> </del> — | ⊢        | ⊢            | ⊢        | ├-   | Н        | ⊢  | H        | _  |   |  | 54<br>55  | $\dashv$        | -+              | +        | +       | ╀        | $\vdash$                  | -+-             | - ::     | ⊪            |          | 104<br>105 |          | $\dashv$        | -+       | +        |          | -        | $\dashv$ | $\dashv$ |          |
|          | 5        | ⊢              | -        | H            | ⊢        | H  | Н        | Ь  | H        |  |   |  | 56        | $\dashv$        | +               | ╅        | +-      | ╁        | -                         |                 | - ∷      | ŀ            | -        | 106        |          | $\dashv$        | $\dashv$ | +        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 7        | ╁              | ⊢        | -            | <u> </u> |  | $\vdash$ | $\vdash$   | $\vdash$ |  |   |  | 57        | $\vdash$        | +               | +        | +       | +        | ╁                         | +               | -        | ŀ            |          | 107        | $\dashv$ | $\dashv$        | $\dashv$ | _        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 8        | ╁─             | ┢        | -            | ╁        |  | $\vdash$ | -  | ╁        | _  |   |  | 58        | $\vdash$        | 十               | +        | +       | +        | ╁╌┤                       | +               | -        | ı            | $\dashv$ | 108        |          | $\dashv$        |          | ┪        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
| -        | 9        | ╁              | ┢        | ⊢            | $\vdash$ | $\vdash$   | ┢╾       |  |          |  |   |  | 59        | H               | +               | 十        | ╁       | +        | $\vdash$                  | $\dashv$        | -        | ı            |          | 109        | -        | $\dashv$        |          | _        | -        | 十        | -        | 十        | $\dashv$ |
|          | 10       | $t^-$          | ╁        | H            | ┢        | $\vdash$   |          | -  | $\vdash$ | -  |   |  | 60        | H               | +               | 十        | +       | +        | 1 1                       |                 | †։։      | ::: <b> </b> |          | 110        | $\neg$   |                 | _        | 寸        | 寸        | 寸        | 十        | 十        | ㅋ        |
|          | 11       | t              | ╁        | $\vdash$     | $\vdash$ | H  |          | Ι-   | $\vdash$ | $\vdash$   |   |  | 61        | $\vdash$        |                 | $\dashv$ | +       | T        | $\dagger \exists \dagger$ | $\top$          | $\dashv$ |              |          | 111        | $\dashv$ | $\dashv$        | 寸        | $\dashv$ | 寸        | $\dashv$ | 十        | 十        | $\dashv$ |
| $\vdash$ | 12       | t              | $\vdash$ | t            | $\vdash$ | <del>                                     </del> | Н        | $\vdash$   | T        | $\vdash$   |   |  | 62        | $\vdash$        | $\dashv$        | $\dashv$ | $\top$  | $\top$   | $\dagger \dagger$         | 十               | _        | ŀ            |          | 112        | $\dashv$ | $\dashv$        | ┪        | $\dashv$ | 寸        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
|          | 13       | $t^{-}$        | T        | Г            | $\vdash$ | Т  |          | T  | П        | Т  |   |  | 63        | $\sqcap$        | $\dashv$        | _        | $\top$  | $\top$   | 17                        | $\dashv$        | 7        | t            |          | 113        |          | $\dashv$        | $\dashv$ | $\neg$   |          | ヿ        | $\dashv$ | ヿ        | $\neg$   |
| 1        | 14       | 1              | 1        | Т            | Π        | ⇈  | П        | П  | П        |  |   |  | 64        | П               | 十               | 十        | 1       | T        | $\sqcap$                  | Ţ               | 7        | ii t         |          | 114        |          | $\Box$          | $\neg$   | $\neg$   |          |          | $\Box$   | ╛        | $\Box$   |
|          | 15       | T              | Τ_       | Г            | T        | Τ  |          |  |          |  |   |  | 65        | П               | $\neg$          | T        | $\neg$  | 1        |                           |                 |          |              |          | 115        |          |                 |          |          |          |          |          | $\Box$   |          |
|          | 16       | Т              | 1        | Ī            | Ī        |  | Г        |  |          |  |   |  | 66        |                 |                 |          |         | Ι        |                           |                 |          |              |          | 116        |          |                 | $\Box$   |          |          |          | $\Box$   | $\Box$   |          |
|          | 17       |                | Π        |              |          |  | П        |  |          |  |   |  | 67        | П               |                 |          |         |          |                           |                 |          |              |          | 117        |          |                 |          |          |          | $\Box$   |          | $\Box$   |          |
|          | 18       | Γ              |          |              |          |  |          |  |          |  |   |  | 68        |                 |                 |          |         |          |                           |                 |          |              |          | 118        |          |                 |          | $\Box$   |          | $\Box$   | $\perp$  | $\sqcup$ |          |
|          | 19       | Т              | Г        | Ī            |          |  |          |  |          |  |   |  | 69        |                 |                 |          |         |          |                           |                 |          |              |          | 119        |          |                 |          | $\Box$   |          | $\Box$   |          | $\sqcup$ |          |
|          | 20       |                |          |              |          |  |          |  |          |  |   |  | 70        |                 | $\Box$          |          |         | $\perp$  | $\bot$                    |                 | ::       |              |          | 120        |          |                 | _        | _        | _        | $\dashv$ | _        | $\dashv$ |          |
|          | 21       |                |          |              |          |  |          |  |          |  |   |  | 71        |                 | $\perp$         | $\perp$  |         |          | Ш                         | $\perp$         | _ ::     |              |          | 121        |          |                 | _        | _        | _        | _        | _        | $\dashv$ |          |
|          | 22       |                |          |              | L        |  |          | <u> </u>   | L        | _  |   |  | 72        |                 | _ _             |          |         | <u> </u> |                           |                 | _        |              |          | 122        |          | _               | _        |          | _        | _        | _        | _        |          |
|          | 23       | _              |          | <u> </u>     | <u> </u> | ┖  | L        | L  | _        |  |   |  | 73        | Ш               | _               | $\perp$  | $\perp$ | 1        | $\sqcup$                  | -               | _ ∷      |              |          | 123        |          | $\Box$          | _        |          | _        | _        | _        |          |          |
| <u></u>  | 24       | _              | L        | $oxed{oxed}$ | ╙        | <u> </u>   | _        | <u> </u>   |          | L  |   | <u> </u>   | 74        |                 | _               | 4        | _       | 1        | $\sqcup$                  | _               | 4        |              |          | 124        |          | Ц               | _        | _        | _        |          | $\dashv$ | $\dashv$ |          |
| <u> </u> | 25       | ļ              |          | <u> </u>     | ┖        | $oxed{oxed}$                                     | <u> </u> | _  | ļ        |  |   |  | 75        | $\sqcup$        | _               | -        | $\perp$ | $\perp$  | $\vdash$                  | _               | -1::     |              |          | 125        |          |                 |          | _        | _        |          |          | $\dashv$ | _        |
| <u> </u> | 26       | ┡              | ļ        | _            | <u> </u> | _  | L        |  | ┡        | -  |   |  | 76        | Н               |                 | 4        | -       | 4        | $\dashv$                  | _               | -        |              |          | 126        | -        | $\dashv$        | -        |          | -        | $\dashv$ | $\dashv$ |          | _        |
|          | 27       |                | ļ        | <u> </u>     | ┡        | ├  | ┡        | _  | ⊢        | ┡  |   |  | 77        | Н               | -               | +        | +       | +        | 1-1                       | +               | - :      | ⊪            |          | 127        |          | $\vdash$        | -        | $\dashv$ |          |          | $\dashv$ | $\dashv$ | 4        |
| <u> </u> | 28       | ╄              | ļ        | <u> </u>     | ▙        | ┞-   | ┡        | ⊢  | ┷        | ┡  |   | ļ  | 78        | $\vdash \vdash$ | -+              | +        | +       | +        | ╁┈┤                       | $\dashv$        | -        | 4            |          | 128        |          | $\dashv$        | $\dashv$ | $\vdash$ |          | $\dashv$ | $\dashv$ | $\dashv$ |          |
| <u> </u> | 29       | ╀              | ┼        | ┡            | 1        | ├-   | 1        | ├  | ₩        | ┢  |   | <u> </u>   | 79<br>80  | $\vdash$        | $\dashv$        | +        | +       | ╁        | ┼╌┤                       | _               |          |              |          | 129<br>130 | Н        | Н               | -        |          |          | $\dashv$ | $\dashv$ |          |          |
|          | 30       | ╀              | ╁        | ⊢            | ┿        | ┝  | ļ        | ├  | ╀        | <del> </del>                                     |   |  |           | $\vdash$        | $\dashv$        | +        | +       | +-       | ╁                         | +               | - :      |              |          | 131        | -        | $\vdash$        | $\dashv$ |          | $\dashv$ | $\vdash$ | $\dashv$ | $\dashv$ | -        |
| <u> </u> | 31<br>32 | ╀              | +-       | ╀            | $\vdash$ | ⊢  | -        | ₩  | -        | $\vdash$   |   | <u> </u>   | 81<br>82  | $\vdash \vdash$ | -+              | +        | +       | +        | +                         | +               | -        | ⊪            |          | 132        | $\vdash$ | $\vdash$        | -        | -        |          | $\dashv$ | -        | ᆉ        | _        |
| $\vdash$ | 33       | ╁╴             | +        | $\vdash$     | ╁        | $\vdash$   | $\vdash$ | <del>                                     </del> | $\vdash$ | <del>                                     </del> |   | <u> </u>   | 83        | $\vdash$        | $\dashv$        | +        | +       | +        | +                         | +               | -        | 1            |          | 133        | Н        | $\vdash \vdash$ | $\dashv$ | $\dashv$ | ᅱ        | -        | $\dashv$ | $\dashv$ | —        |
| -        | 34       | +              | +        | -            | ╁        | $\vdash$   | $\vdash$ | ╁  | +        | <del> </del> —                                   |   | $\vdash$   | 84        | ╁               | $\dashv$        | +        | +-      | +        | +                         | +               | $\dashv$ | 1            |          | 134        | $\vdash$ | $\vdash \dashv$ | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |          |
| -        | 35       | +-             | +        | H            | $\vdash$ | -  | $\vdash$ | <del>                                     </del> | $\vdash$ | $\vdash$   |   | <del></del>                                      | 85        | $\vdash$        | $\dashv$        | -+       | +       | +        | +-1                       | +               | -        | ⊪            |          | 135        | $\vdash$ | ┌┤              | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | _        |
| -        | 36       | ╁╴             | +        | H            | +        | <del> </del>                                     | $\vdash$ | $\vdash$   | +        | $\vdash$   |   |  | 86        | $\vdash$        | $\dashv$        | $\dashv$ | 十       | +        | +-1                       | $\dashv$        | -        |              |          | 136        | Н        | $\vdash$        | $\dashv$ |          |          | $\neg$   | $\dashv$ | 一        |          |
|          | 37       | +              | +        | t            | +        | t-   | $\vdash$ | t-   | $\vdash$ | t  |   | <del>                                     </del> | 87        |                 | $\dashv$        | $\dashv$ | +       | $\top$   | +                         | $\dashv$        | -        |              |          | 137        | Н        | Н               | $\neg$   |          | $\dashv$ | $\sqcap$ | $\neg$   | 一        |          |
|          | 38       | +              | +        | $t^-$        | T        | 1-   | T        | †  | $\vdash$ | <del>                                     </del> |   | <u> </u>   | 88        | $\vdash$        | 十               | $\top$   | 十       | $\top$   | ${}^{\dagger}$            | $\dashv$        | ١        |              |          | 138        | П        | $\Box$          |          |          | $\neg$   | $\sqcap$ | $\neg$   | ᅥ        | _        |
| <b>—</b> | 39       | +              | t        | T            | T        | t  | I        | t  | $t^-$    | Т  |   | $\vdash$   | 89        | П               |                 | 十        | 十       | 十        | $\sqcap$                  | $\neg \uparrow$ | 1        |              |          | 139        | П        |                 |          |          | $\neg$   |          |          | ヿ        | _        |
|          | 40       | T              | T        | T            | †        | T  | 1        | T  | $\vdash$ | Г  |   |  | 90        | П               | 十               | 十        | $\top$  | 1        | T                         | $\dashv$        | 1        |              |          | 140        | П        | $\Box$          |          |          |          |          | $\Box$   | $\neg$   | _        |
|          | 41       | T              | T        | t            | $\vdash$ | T  | T        | t  | $\vdash$ | <del>                                     </del> |   |  | 91        | П               | 十               | $\dashv$ | $\top$  | $\top$   | $\top$                    | $\dashv$        | 7        |              |          | 141        | П        |                 |          |          |          |          | Ħ        | ヿ        | _        |
|          | 42       | T              | T        | 1-           | T        | T  | $\vdash$ | Т  | Τ        |  |   |  | 92        | П               | $\neg \uparrow$ | $\neg$   | $\top$  | 1        | $\Box$                    | ヿ               | 7        |              |          | 142        | П        |                 |          |          |          | П        |          | $\Box$   | _        |
|          | 43       | T              | $\top$   | 1            |          | 1  | T        | $\Box$   |          |  |   |  | 93        | П               | $\neg$          | $\neg$   | $\top$  | $\top$   | П                         | $\neg$          | 7        |              |          | 143        |          |                 |          |          |          |          |          | 二        | _        |
|          | 44       | $\top$         | $\top$   |              | T        | T  | Τ        |  | Τ        |  |   |  | 94        |                 |                 |          |         | $\perp$  |                           |                 |          |              |          | 144        |          |                 |          |          |          |          |          |          | _        |
|          | 45       | Т              | T        | 1            | $\vdash$ | 1  | Τ        |  | T        |  |   |  | 95        |                 |                 |          |         |          |                           |                 |          |              |          | 145        |          |                 |          |          |          |          |          |          |          |
|          | 46       | 1              | 1        | T            | T        | Τ  | T        |  | T        |  |   |  | 96        |                 |                 |          | $\top$  | $\top$   |                           | 丁               | _1       |              |          | 146        |          |                 |          |          |          |          |          |          |          |
|          | 47       | T              | T        | T            | 1        |  | T        | 1  | 1        | Π  |   |  | 97        |                 | $\neg$          | $\neg$   | $\top$  |          |                           |                 |          |              |          | 147        |          |                 |          |          |          |          |          |          |          |
|          | 48       | Ť              | $\top$   | $\top$       | 1        | Τ  |          | Π  |          |  | ] |  | 98        |                 |                 |          |         |          | $\Box$                    | T               |          |              |          | 148        |          |                 |          |          |          |          |          | ╝        |          |
|          | 49       | $\dagger$      | T        | T            | 1        | Τ  | T        | Π  | 1        | Г  |   |  | 99        |                 |                 |          |         |          |                           |                 |          |              |          | 149        |          |                 |          |          |          |          |          |          |          |
|          | 50       | Τ              | T        | Π            |          | Ĺ  |          |  |          |  |   |  | 100       |                 |                 |          |         | I        |                           |                 |          |              |          | 150        |          |                 |          |          |          |          |          |          |          |